



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/711,822	10/07/2004	Donald R. Moody	018300-001728	5821
24239 7590 10/28/2008 MOORE & VAN ALLEN PLLC P.O. BOX 13706 Research Triangle Park, NC 27709				
EXAMINER				
PAINTER, BRANON C				
ART UNIT		PAPER NUMBER		
3633				
MAIL DATE		DELIVERY MODE		
10/28/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/711,822

Applicant(s)

MOODY ET AL.

Examiner

BRANON C. PAINTER

Art Unit

3633

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date 08/21/08 & 09/19/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDS) submitted on 08/21/08 and 09/18/08 are being considered by the examiner.

Claim Rejections - 35 USC § 103

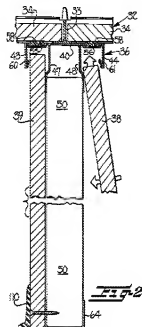
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

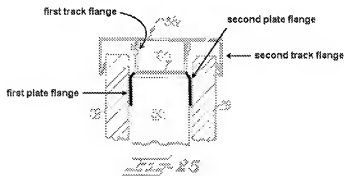
3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carver (4,361,994).
 - a. Carver discloses a wall system including:
 - i. A top track (36e) with horizontal web, first flange, and second flange extending only downward from the web of the top track at right angles (amended Fig. 25).

- ii. A top plate (70) with horizontal web, first flange, and second flange extending only downward from the web of the top plate at approximately right angles (amended Fig. 25). The examiner notes that the highlighted flanges are considered to be the left and right hand members of plate 70 that extend only downward as claimed and as shown in amended Fig. 25.
 - iii. Wherein the top plate is disposed in the top track such that the webs and first flanges are in close and complimentary relation and an opening is formed between the second flanges (amended Fig. 25). The examiner notes that as the webs and flanges are close to one another and complimentary, this interpretation of Carver meets the claim limitations.
 - iv. Vertical studs mounted to and extending between the top and bottom plates, wherein the top and bottom plates oppose each other (50, Fig. 2, 25).
- b. Carver does not expressly disclose a bottom track or plate extending upwardly in the same structural manner as the top track and plate.
 - c. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the bottom tracking of Carver by replacing it with the same tracking used on the top of the wall system (orienting it, as would be obvious from the orientation of bottom tracking 64, in an upward-

facing manner), in order to provide a wall system whose wallboards can be attached without the use of fasteners.



Reproduced from Carver

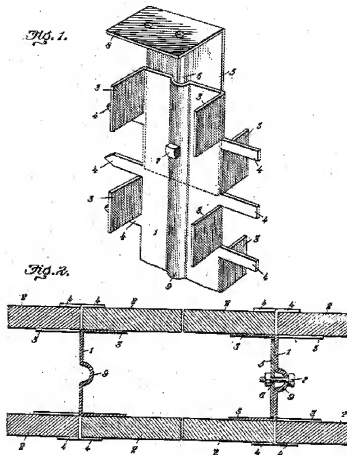


Reproduced from Carver (amended)

5. Regarding claim 2, Carver as modified above further discloses rigid insulation between the top and bottom tracks, including two horizontal edges disposed in the longitudinal openings and two vertical edges (39, Fig. 25). The examiner notes that

39 is disclosed as a wallboard panel. However, wallboard panels have a rigidity and insulative properties, and as such meet the claim limitations.

6. Claims 3-5, 7, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carver (4,361,994) in view of Caldwell (1,074,242).
7. Regarding claim 3:
 - a. Carver discloses a wall system as set forth above.
 - b. Carver does not expressly disclose a vertical framing component extending between the top and bottom plates including an elongated planar web with projections from each edge at right angles in both directions such that a slot is formed on each side of the web.
 - c. Caldwell discloses a vertical framing component extending between the top and bottom plates (1, Fig. 1) including an elongated planar web (Fig. 1) with projections from each edge at right angles in both directions (3, 4) such that a slot is formed on each side of the web (slot formed between 3 and 4 for receiving insulating boards on both sides, Fig. 2; the examiner notes a slot is also formed between two tabs on separate framing elements which face one another).
 - d. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the wall system of Carver by adding panel-holding framing components as taught by Caldwell, in order to provide the panels of Carver with support and alignment at their vertical edges.



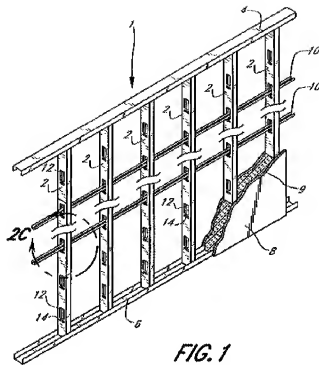
Reproduced from Caldwell

8. Regarding claim 4:
- Carver/Caldwell as modified above discloses a wall system wherein at least one framing component is interposed between adjacent studs.
 - The examiner notes that including the framing component in the wall of Carver would necessarily require the framing component to be between two adjacent studs, since it is notoriously well-known that studs are positioned at both edges of a wall for support and periodically throughout a wall, so that

any framing component placed in the wall of Carver would necessarily be interposed between two adjacent studs.

9. Regarding claim 5, Carver/Caldwell as modified above further discloses a plurality of thermal framing components mounted to the second flange of the top and bottom plates (the plurality of framing components 1 of Caldwell are indirectly mounted to second flanges of Carver via panels 39).
10. Regarding claim 7, Carver/Caldwell as modified above further discloses vertical edges of panels disposed in a slot of the framing component (Caldwell: 2 in slot between 3 and 4, Fig. 2; when used in combination with Carver as discussed above, Carver's panels 39 would be disposed in this slot).
11. Regarding claims 14-15, the combination renders the claimed method steps obvious since such would be the logical manner of using the combination.
12. Claim 8 and 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carver/Campbell as applied to claims 3-5, 7, 9, 11, and 14-16 above, and further in view of Poliquin (2001/0004820).
13. Regarding claim 8:
 - a. Carver/Campbell discloses a wall system as set forth above.
 - b. Carver/Campbell does not expressly disclose that the studs and framing components are mounted to horizontal blocking.
 - c. Poliquin discloses a plurality of vertical components mounted to horizontal blocking approximately halfway between top and bottom plates (2 mounted

- to 10 halfway between 4 and 6, Fig. 1). The mounting is facilitated by cut-outs 12 in the vertical members.
- d. The examiner further notes motivation for combining the references as set forth in Poliquin ([0005]).
 - e. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the studs and framing components of Carver/Campbell by providing them with cut-outs midway along their height and mounting horizontal blocking through the cut-outs as taught by Poliquin, in order to connect and bridge the studs and framing components, improving the wall system's strength and resistance to buckling.
 - f. The examiner further notes that it would have been an obvious matter of design choice to modify Carver/Campbell by including horizontal blocking halfway between the top and bottom plates, since it is notoriously well-known in the art to use this structure to reinforce and strengthen the framework of a wall system.

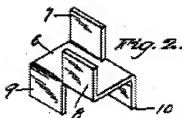


Reproduced from Poliquin

14. Regarding claim 17, the combination renders the claimed method steps obvious since such would be the logical manner of using the combination.
15. Claims 9, 11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carver/Caldwell as applied to claims 3-5, 7, and 14-15, and further in view of Zanella (1,905,616).
16. Regarding claims 9 and 11:
- Carver/Caldwell discloses a wall system with top and bottom plates and tracks, vertical studs, framing components, and insulation sheets as discussed with respect to claims 1-3 above, and further discloses a framing component having an elongated planar web with longitudinal axis, a second

edge parallel the axis a first and second side (Caldwell: 1, Fig. 1), with first and second planar tabs extending from the first edge approximately 90 degrees from the first and second sides, respectively, and in opposite directions (3, 3, Fig. 1), a third planar tab extending from the second edge approximately 90 degrees from the second side (3, 3, Fig. 1) [claim 9], and a fourth tab extending from the second edge approximately 90 degrees from the first side (Caldwell: 3, Fig. 1), with the first and fourth tabs forming a slot, and the second and third tabs forming a slot (Fig. 1) [claim 11].

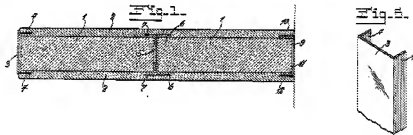
- b. Carver/Caldwell does not expressly disclose that the third planar tab extends in a direction opposite that of the first planar tab [claim 9], or that the fourth planar tab extends in a direction opposite that of the second planar tab [claim 11].
- c. Zanella discloses a board-holding clip whose flanges extend from the web in the claimed manner (6-10, Fig. 2). Arranging the flanges of Carver/Caldwell in the manner shown by Zanella provides a decreased oscillation of the holder when compared to flanges like Carver/Caldwell that extend in the same direction from both sides at a given longitudinal position (p. 2, 68-75).
- d. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the framing component of Carver/Caldwell by orienting the flanges as taught by Zanella, in order to provide decreased oscillation of the holder.



Reproduced from Zanella

17. Regarding claim 16, the combination renders the claimed method steps obvious since such would be the logical manner of using the combination.
18. Claims 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carver/Campbell as applied to claims 3-5, 7, and 14-15 above, and further in view of Ryan (1,867,329).
19. Regarding claim 10:
- Carver/Campbell discloses a wall system as set forth above.
 - Carver/Campbell does not expressly disclose a thermal end cap including an approximately vertical web with flanges projecting at right angles and one edge of rigid insulation disposed between the flanges.
 - Ryan discloses a thermal end cap (Fig. 1, 6) including an approximately vertical web (3) with flanges projecting at right angles (4) and one edge of rigid insulation disposed between the flanges (1).
 - At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the wall system of Carver/Campbell by including a vertical cap as taught by Ryan, in order to provide a protective cover for a vertical edge of the wall system.

20. Regarding claim 18, the combination renders the claimed method steps obvious since such would be the logical manner of using the combination.



Reproduced from Ryan

21. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carver/Campbell/Zanella as applied to claims 9, 11, and 16 above, and further in view of Ryan (1,867,329).
- Carver/Campbell/Zanella discloses a wall system as set forth above.
 - Carver/Campbell/Zanella does not expressly disclose a thermal end cap including an approximately vertical web with flanges projecting at right angles and one edge of rigid insulation disposed between the flanges.
 - Ryan discloses a thermal end cap (Fig. 1, 6) including an approximately vertical web (3) with flanges projecting at right angles (4) and one edge of rigid insulation disposed between the flanges (1).
 - At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the wall system of Carver/Campbell/Zanella by including a vertical cap as taught by Ryan, in order to provide a protective cover for a vertical edge of the wall system.

22. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carver (4,361,994) in view of Rutkowski (4,435,936).

23. Regarding claim 3:

- a. Carver discloses a wall system as set forth above.
- b. Carver does not expressly disclose a vertical framing component extending between the top and bottom plates including an elongated planar web with projections from each edge at right angles in both directions such that a slot is formed on each side of the web.
- c. Rutkowski discloses a wall system with a stud connected to a vertical framing component extending between the top and bottom plates (10, Fig. 2; amended Fig. 5) including an elongated planar web (amended Fig. 5) with projections from each edge at right angles in both directions (64, 22) such that a slot is formed on each side of the web (slot receiving 68).
- d. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to replace the studs of Carver with connected stud and panel-holding framing components as taught by Rutkowski, in order to provide the panels of Carver with support and alignment at their vertical edges.

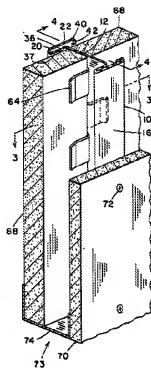


Fig. 2

Reproduced from Rutkowski

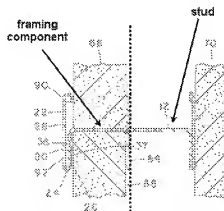


Fig. 3

Reproduced from Rutkowski (amended)

24. Regarding claim 6, Carver/Rutkowski as amended above further discloses a plurality of thermal framing components mounted to steel studs (connected framing component and stud, amended Fig. 5).

Response to Arguments

25. Applicant's arguments filed 09/19/08 have been fully considered but they are not persuasive.
26. Applicant argues that the track and plate of Carver are supposedly not in "close and complementary registration." However, the examiner notes that this terminology is relative, as is applicant's disclosure in the specification that the webs and flanges are "substantially nested with each other." The applicant is not claiming that the webs are directly connected or are otherwise in direct contact, only that they are "close and complementary" and "substantially nested." The plate and track of Carver meet this limitation, as these pieces are relatively close and complementary to one another, and as they are substantially nested.
27. Applicant further argues that Carver's design is supposedly not load-bearing, as is applicant's nested design. The examiner notes that the structure is not claimed as being capable of bearing a load. If this claim limitation were present, Carver would certainly be capable of bearing a load, as applicant admits that the elements of Carver provide structural support by bearing the horizontal load of a wallboard.
28. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e.,

load-bearing members) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

29. Applicant argues that Carver/Caldwell does not disclose the Z-shaped thermal framing tabs as claimed. However, the new combination of Carver/Caldwell/Zanella does disclose all the claim limitations as set forth in the rejection above.
30. Applicant argues the added recitation of "planar" tabs. The examiner notes that the tabs of Carver/Caldwell/Zanella are planar as set forth in the rejection above.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANON C. PAINTER whose telephone number is (571)270-3110. The examiner can normally be reached on Mon-Fri 7:30AM-5:00PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. C. P./
Examiner, Art Unit 3633
10/27/08

/Richard E. Chilcot, Jr./
Supervisory Patent Examiner, Art Unit 3635